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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/530,537

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Jin-Ha Park

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EXAMINER

SUERETH, SARAH ELIZABETH

ART UNIT

PAPER NUMBER

3749

MAIL DATE

DELIVERY MODE

06/20/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/530,537	Applicant(s) PARK, JIN-HA	
	Examiner Sarah Suereth	Art Unit 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/6/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In Claims 1 and 2, the last lines of each claim, the phrase "disconnects circuits the two terminals in an "OFF" status and an end of set status, and electrically connects the two terminals while a time setup is maintained" is unclear. Specifically, what is meant by "end of set status" and "while a time setup is maintained" is unclear from the claims. For the purposes of examination, the claims are regarded to claim that the timer disconnects the circuit between the thermocouple and opening/closing unit when the timer expires, and the circuit remains connected while the timer is running.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1,2 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Rodriguez-Rodriguez (US Patent Application Publication 2002/0094498).

5. Rodriguez- Rodriguez discloses: an overheat prevention apparatus for a gas stove (pg. 0022) burner (10) including a thermocouple (18), a magnetic opening/closing unit (14); and a timer (24) including a timer switch (60). Figure 1 shows the timer connected to the thermocouple via line 22, and to the opening/closing unit via line 26. The timer disconnects the circuit when it expires (pg. 0028).

6. Regarding claim 7, there is a power source (pg. 0055), an input button unit (see “keyboard”, pg. 0033), a digital display (66), and control circuit unit (62).

7. Claims 1,2 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Huang et al (US Patent 6,164,958).

8. Huang discloses: an overheat prevention apparatus for a gas stove (90) having four burners (99A-D) each including a thermocouple (34), a magnetic opening/closing unit (97); and a timer (44) including a timer switch (46). Figure 1 shows the timer connected to the thermocouple, and to the opening/closing unit. The timer disconnects the circuit when it expires (col. 3, lines 15-20).

9. Regarding claim 4, Huang discloses that the burners may operate with a plurality of timer switches (col. 6, lines 10-18).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 3-6,10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez-Rodriguez (US Patent Application Publication 2002/0094498).

12. As discussed above, Rodriguez-Rodriguez discloses the invention as claimed with the exception of stating what type of fuel the burner uses, and that there are a plurality of burners.

13. The Examiner takes Official Notice that it was old and notorious in the art to operate gas burners using either natural gas or butane.

14. It would have been obvious to one of ordinary skill in the art at the time the invention was made to operate the Rodriguez-Rodriguez apparatus with the claimed fuel sources in order to use well known types of fuel.

15. Regarding claim 6, the Rodriguez-Rodriguez stove is regarded as portable.

16. Regarding claim 4, Rodriguez-Rodriguez discloses that there is a burner connected to a timer and to the valve, and that this entire assembly is meant to be part

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of a gas stove (pg. 0022). However, Rodriguez-Rodriguez does not disclose that the stove has more than one burner, each including a thermocouple, valve, and separate timer.

The courts have held that duplication of parts for amplified effect does not distinguish over the prior art, unless a new and unexpected result is produced (In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960) , also MPEP 2144.04).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Rodriguez-Rodriguez apparatus by duplicating the claimed burner assembly, in order to increase the amount of food that could be cooked at one time. When adding multiple burners, it would have been obvious to include each one with the disclosed overheat prevention assembly in order to allow the user to establish a predetermined operating time for the burner (pg. 0011).

17. Regarding claim 10, it is not clear from the Figures if the circuitry includes a signal amplifier, oscillator, or a microcomputer. The control circuitry obviously includes a digit formation signal generator, as the clock has a digital display (66), but that portion of the circuitry is not explicitly shown. The controller (62) performs all of the recited functions, but is not defined as a "microcomputer".

The examiner takes Official Notice that it was old and notorious in the art to use signal amplifiers, oscillators, and microcomputers to control stoves.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Rodriguez-Rodriguez apparatus by using old and well known circuitry components in their intended manner.

18. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez-Rodriguez (US Patent Application Publication 2002/0094498) in view of Huang et al (US Patent 6,164,958).

19. Rodriguez-Rodriguez, as discussed above, discloses the invention as claimed with the exception of disclosing indicator lights corresponding to burner ignition, and an alarm system for the stove.

20. Huang discloses a gas stove including indicator lights (38) for indicating burner ignition (col. 3, lines 32-35), and a gas sensor (50) that triggers an alarm (col. 4, lines 19-22).

21. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Rodriguez-Rodriguez apparatus with the safety display features of Huang in order to alert the user if unsafe conditions exist (col. 3, lines 29-33).

22. Claims 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez-Rodriguez (US Patent Application Publication 2002/0094498) in view of Herbert (US Patent 5,295,476).

23. Rodriguez-Rodriguez, as discussed above, discloses the invention as claimed with the exception that the controller is not discloses to stop the gas supply when the thermocouple senses the temperature at the burner exceeds a threshold value.

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24. Herbert discloses a gas stove including a thermocouple (61) (col. 8, lines 14-16) connected to a controller (62). When the temperature sensed by the thermocouple exceeds a threshold value, the controller closes the gas solenoid valve (57) (col. 6, lines 15-23).

25. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Rodriguez-Rodriguez apparatus by modifying the controller to include the automatic temperature shutoff feature of Herbert, in order to prevent the stove from overheating (col. 7, lines 23-24).

26. Regarding claim 14, it is not clear from the Figures if the circuitry includes a signal amplifier, oscillator, or a microcomputer. The control circuitry obviously includes a digit formation signal generator, as the clock has a digital display (66), but that portion of the circuitry is not explicitly shown. The controller (62) performs all of the recited functions, but is not defined as a "microcomputer".

The examiner takes Official Notice that it was old and notorious in the art to use signal amplifiers, oscillators, and microcomputers to control stoves.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Rodriguez-Rodriguez apparatus by using old and well known circuitry components in their intended manner.

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27. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez-Rodriguez (US Patent Application Publication 2002/0094498) in view of Herbert (US Patent 5,295,476), further in view of Huang et al (US Patent 6,164,958).

28. Rodriguez-Rodriguez in view of Herbert, as discussed above, discloses the invention as claimed with the exception of disclosing indicator lights corresponding to burner ignition, and an alarm system for the stove.

29. Huang discloses a gas stove including indicator lights (38) for indicating burner ignition (col. 3, lines 32-35), and a gas sensor (50) that triggers an alarm (col. 4, lines 19-22).

30. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Rodriguez-Rodriguez apparatus with the safety display features of Huang in order to alert the user if unsafe conditions exist (col. 3, lines 29-33).

Conclusion

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah Suereth whose telephone number is (571) 272-9061. The examiner can normally be reached on Tuesdays & Thursdays 8:00AM-4:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve McAllister can be reached on (571) 272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sarah Suereth/
Examiner, Art Unit 3749

/Steven B. McAllister/
Supervisory Patent Examiner, Art Unit 3749